Name of Work: Estimate for Improvements to Roads and footpath Vinayaka Layout 1st Stage, Vinayaka Layout 2nd Stage and Amrutnagara in Ward No. 07, Byatarayanapura.

'H BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Name of Work: Estimate for improvements to Roads and footpath Vinayaka Layout 1st Stage, Vinayaka Layout 2nd Stage and Amrutnagara in Ward No. 07, Byatarayanapura.

Job Code :- 007-18-000017, 007-18-000018, 007-18-000009, 007-18-000015, 28581

Name of Agency :- B.B. UMESHA

Bill No :- 2nd and Part Bill

Measurements recorded on

Sl No.	Description of item / Chainage		Unit	No	L	B	D	Qty	Remarks
32	Removing and refixing stone slabs of drains and pointing in CM (1:3) Page No. 25 / Item No. 5.33 PWD SR 2016-17								
	12 th Main Road								
	LHS								
	30.00	45.00	L/S	1	15.00		1.35	20.25	
	45.00	60.00	1.00	1	15.00		1.35	20.25	
	60.00	75.00	1.00	1	15.00		1.35	20.25	
	75.00	90.00	1.00	1	15.00		1.35	20.25	
	RHS								
	75.00	90.00	R/S	1	15.00		1.35	20.25	
	90.00	105.00	R/S	1	15.00		1.35	20.25	
	105.00	120.00	R/S	1	15.00		1.35	20.25	
	120.00	135.00	R/S	1	15.00		1.35	20.25	
	4th A Cross Road								
	1st Stage Vinayaka Badavane								
	LHS								
	30.00	45.00	L/S	1	15.00		1.35	20.25	
	45.00	60.00	L/S	1	15.00		1.35	20.25	
	60.00	75.00	L/S	1	15.00		1.35	20.25	
	RHS								
	0.00	15.00	R/S	1	15.00		1.35	20.25	
	15.00	30.00	R/S	1	15.00		1.35	20.25	
	30.00	50.00	R/S	1	13.00		1.35	17.55	
	3rd A Cross Road								
	1st Stage Vinayaka Badavane								
	LHS								
	30.00	45.00	L/S	1	15.00		1.35	20.25	
	45.00	60.00	L/S	1	15.00		1.35	20.25	
	60.00	75.00	L/S	1	15.00		1.35	20.25	
	RHS								
	15.00	30.00	R/S	1	15.00		1.35	20.25	
	30.00	45.00	R/S	1	15.00		1.35	20.25	
	45.00	60.00	R/S	1	15.00		1.35	20.25	
	2nd A Cross Road								
	1st Stage Vinayaka Badavane								
	LHS								

Consultant

Assistant Engineer

Assistant Executive Engineer

Measurements recorded on									
Sl No.	Description of item		Unit	No	L	B	D	Qty	Remarks
	Chainage								
	0.00	15.00	L/S	1	15.00		1.35	20.25	
	15.00	30.00	L/S	1	15.00		1.35	20.25	
	30.00	45.00	L/S	1	15.00		1.35	20.25	
	45.00	60.00	L/S	1	15.00		1.35	20.25	
	RHS								
	0.00	15.00	R/S	1	15.00		1.35	20.25	
	15.00	30.00	R/S	1	15.00		1.35	20.25	
	30.00	45.00	R/S	1	15.00		1.35	20.25	
			Sqm			Total Quantity		544.05	

NDD
DE(RZ)
2/12/18

Consultant

Assistant Engineer

Assistant Excecutive Engineer

Measurements recorded on									
Sl No.	Description of item / Chainage		Unit	No	L	B	D	Qty	Remarks
1	KSRRB 300-1. Earthwork **excavation by manual means in ordinary soil** involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3								
	Rcc Drain								
	1st Main road Chinnappa Layout								
	LHS								
	0.00	15.00	L/S	1	15.00	1.10	0.85	14.03	
	15.00	30.00	L/S	1	15.00	1.10	0.85	14.03	
	30.00	45.00	L/S	1	15.00	1.10	0.85	14.03	
	45.00	60.00	L/S	1	15.00	1.10	0.85	14.03	
	60.00	75.00	L/S	1	15.00	1.10	0.85	14.03	
	75.00	90.00	L/S	1	15.00	1.10	0.85	14.03	
	90.00	105.00	L/S	1	15.00	1.10	0.85	14.03	
	105.00	120.00	L/S	1	15.00	1.10	0.85	14.03	
	120.00	135.00	L/S	1	15.00	1.10	0.85	14.03	
	135.00	150.00	L/S	1	15.00	1.10	0.85	14.03	
	150.00	165.00	L/S	1	15.00	1.10	0.85	14.03	
	165.00	176.00	L/S	1	11.00	1.10	0.85	10.29	
	RHS								
	0.00	15.00	R/S	1	15.00	1.10	0.85	14.03	
	15.00	30.00	R/S	1	15.00	1.10	0.85	14.03	
	30.00	45.00	R/S	1	15.00	1.10	0.85	14.03	
	45.00	60.00	R/S	1	15.00	1.10	0.85	14.03	
	60.00	65.00	R/S	0	5.00	0.00	0.00	0.00	**Cross Road**
	65.00	80.00	R/S	1	15.00	1.10	0.85	14.03	
	80.00	90.00	R/S	1	10.00	1.10	0.85	9.35	
	90.00	97.00	R/S	0	7.00	0.00	0.00	0.00	**Cross Road**
	97.00	112.00	R/S	1	15.00	1.10	0.85	14.03	
	112.00	127.00	R/S	1	15.00	1.10	0.85	14.03	
	127.00	142.00	R/S	1	15.00	1.10	0.85	14.03	
	142.00	170.00	R/S	1	28.00	1.10	0.85	26.18	
	1st Cross Road Chinnappa Layout								
	LHS								
	0.00	15.00	L/S	1	15.00	1.10	0.85	14.03	
	15.00	30.00	L/S	1	15.00	1.10	0.85	14.03	
	30.00	45.00	L/S	1	15.00	1.10	0.85	14.03	
	45.00	50.00	L/S	1	5.00	1.10	0.85	4.68	
	RHS								
	0.00	15.00	R/S	1	15.00	1.10	0.85	14.03	
	15.00	30.00	R/S	1	15.00	1.10	0.85	14.03	
	30.00	40.00	R/S	1	10.00	1.10	0.85	9.35	

Measurements recorded on								
Sl No.	Description of item / Chainage	Unit	No	L	B	D	Qty	Remarks
	Over Burden Earth							
	1st Cross Road Chinnappa Layout							
			3	2.00	0.60	0.70	2.52	
			4	3.00	0.85	0.70	7.14	
			4	2.50	0.65	1.00	6.50	
	13th A Cross Extension Road Gopalappa Layout							
			3	2.00	0.55	0.45	1.49	
			3	4.00	0.70	0.55	4.62	
			4	2.50	0.65	0.65	4.23	
	12th A Cross Extension Road Gopalappa Layout							
			4	4.00	0.60	0.45	4.32	
			5	3.00	0.50	0.60	4.50	
			4	2.00	0.75	0.80	4.80	
		Cum					436.55	

AEE(Civil) 2/12/18

Consultant

Assistant Engineer

Assistant Excecutive Engineer

Measurements recorded on									
Sl No.	Description of item / Chainage		Unit	No	L	B	D	Qty	Remarks
3	KSRB 4-1.2 : Providing and laying in position **plain cement concrete of mix 1:3:6** with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, **in foundation** including cost of all materials, labour, HOM of machinery, curing complete as per specifications.								
	RCC DRAIN								
	1st Main road Chinnappa Layout								
	LHS								
	0.00	15.00	L/S	1	15.00	0.90	0.10	1.35	
	15.00	30.00	L/S	1	15.00	0.90	0.10	1.35	
	30.00	45.00	L/S	1	15.00	0.90	0.10	1.35	
	45.00	60.00	L/S	1	15.00	0.90	0.10	1.35	
	60.00	75.00	L/S	1	15.00	0.90	0.10	1.35	
	75.00	90.00	L/S	1	15.00	0.90	0.10	1.35	
	90.00	105.00	L/S	1	15.00	0.90	0.10	1.35	
	105.00	120.00	L/S	1	15.00	0.90	0.10	1.35	
	120.00	135.00	L/S	1	15.00	0.90	0.10	1.35	
	135.00	150.00	L/S	1	15.00	0.90	0.10	1.35	
	150.00	165.00	L/S	1	15.00	0.90	0.10	1.35	
	165.00	176.00	L/S	1	11.00	0.90	0.10	0.99	
	RHS								
	0.00	15.00	R/S	1	15.00	0.90	0.10	1.35	
	15.00	30.00	R/S	1	15.00	0.90	0.10	1.35	
	30.00	45.00	R/S	1	15.00	0.90	0.10	1.35	
	45.00	60.00	R/S	1	15.00	0.90	0.10	1.35	
	60.00	65.00	R/S	0	5.00	0.00	0.10	0.00	**Cross Road**
	65.00	80.00	R/S	1	15.00	0.90	0.10	1.35	
	80.00	90.00	R/S	1	10.00	0.90	0.10	0.90	
	90.00	97.00	R/S	0	7.00	0.00	0.10	0.00	**Cross Road**
	97.00	112.00	R/S	1	15.00	0.90	0.10	1.35	
	112.00	127.00	R/S	1	15.00	0.90	0.10	1.35	
	127.00	142.00	R/S	1	15.00	0.90	0.10	1.35	
	142.00	170.00	R/S	1	28.00	0.90	0.10	2.52	
	1st Cross Road Chinnappa Layout								
	LHS								
	0.00	15.00	L/S	1	15.00	0.90	0.10	1.35	
	15.00	30.00	L/S	1	15.00	0.90	0.10	1.35	
	30.00	45.00	L/S	1	15.00	0.90	0.10	1.35	
	45.00	50.00	L/S	1	5.00	0.90	0.10	0.45	
	RHS								
	0.00	15.00	R/S	1	15.00	0.90	0.10	1.35	
	15.00	30.00	R/S	1	15.00	0.90	0.10	1.35	
	30.00	40.00	R/S	1	10.00	0.90	0.10	0.90	

Measurements recorded on									
Sl No.	Description of item / Chainage		Unit	No	L	B	D	Qty	Remarks
	B. S Drain								
	1st Cross Road								
	LHS								
	0.00	15.00	L/S	1	15.00	0.45	0.10	1.50	
	15.00	30.00	L/S	1	15.00	0.45	0.10	1.50	
	30.00	45.00	L/S	1	15.00	0.45	0.10	1.50	
	45.00	60.00	L/S	1	15.00	0.45	0.10	1.50	
	RHS								
	0.00	15.00	R/S	1	15.00	0.45	0.10	1.50	
	15.00	30.00	R/S	1	15.00	0.45	0.10	1.50	
	30.00	45.00	R/S	1	15.00	0.45	0.10	1.50	
	45.00	60.00	R/S	1	15.00	0.45	0.10	1.50	
	2nd Cross Road								
	LHS								
	0.00	15.00	L/S	1	15.00	0.45	0.10	1.50	
	15.00	30.00	L/S	1	15.00	0.45	0.10	1.50	
	30.00	45.00	L/S	1	15.00	0.45	0.10	1.50	
	45.00	60.00	L/S	1	15.00	0.45	0.10	1.50	
	60.00	65.00	L/S	1	5.00	0.45	0.10	0.50	
	RHS								
	0.00	15.00	R/S	1	15.00	0.45	0.10	1.50	
	15.00	30.00	R/S	1	15.00	0.45	0.10	1.50	
	30.00	45.00	R/S	1	15.00	0.45	0.10	1.50	
	45.00	60.00	R/S	1	15.00	0.45	0.10	1.50	
				Cum				62.66	

NDP
DE(W-I)
11/12/18

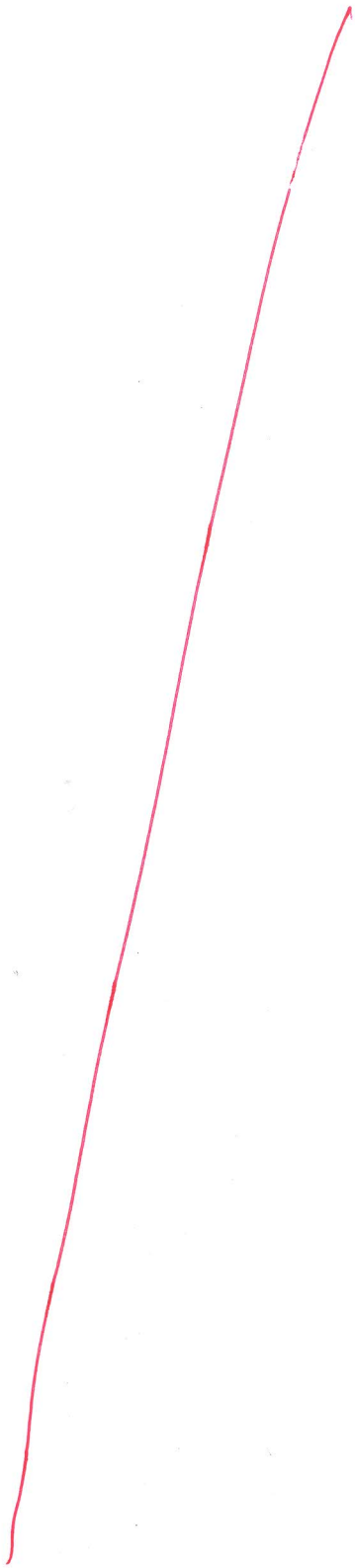
Consultant

Assistant Engineer

Assistant Executive Engineer

Measurements recorded on									
Sl No.	Description of item / Chainage		Unit	No	L	B	D	Qty	Remarks
25	KSRB 4-6.4 : Providing and removing **centering, shuttering, strutting, propping** etc., and removal of form work for **vertical surface such as walls at any thickness**, including attached pilasters, buttresses, plinth cills and string courses cost of all materials, labour complete as per specifications.								
	RCC Drain side wall								
	1st Main road Chinnappa Layout								
	LHS								
	0.00	15.00	L/S	4	15.00		0.60	36.00	
	15.00	30.00	L/S	4	15.00		0.60	36.00	
	30.00	45.00	L/S	4	15.00		0.60	36.00	
	45.00	60.00	L/S	4	15.00		0.60	36.00	
	60.00	75.00	L/S	4	15.00		0.60	36.00	
	75.00	90.00	L/S	4	15.00		0.60	36.00	
	90.00	105.00	L/S	4	15.00		0.60	36.00	
	105.00	120.00	L/S	4	15.00		0.60	36.00	
	120.00	135.00	L/S	4	15.00		0.60	36.00	
	135.00	150.00	L/S	4	15.00		0.60	36.00	
	150.00	165.00	L/S	4	15.00		0.60	36.00	
	165.00	176.00	L/S	4	11.00		0.60	26.40	
	RHS								
	0.00	15.00	R/S	4	15.00		0.60	36.00	
	15.00	30.00	R/S	4	15.00		0.60	36.00	
	30.00	45.00	R/S	4	15.00		0.60	36.00	
	45.00	60.00	R/S	4	15.00		0.60	36.00	
	60.00	65.00	R/S	0	5.00		0.60	0.00	**Cross Road**
	65.00	80.00	R/S	4	15.00		0.60	36.00	
	80.00	90.00	R/S	4	10.00		0.60	24.00	
	90.00	97.00	R/S	0	7.00		0.60	0.00	**Cross Road**
	97.00	112.00	R/S	4	15.00		0.60	36.00	
	112.00	127.00	R/S	4	15.00		0.60	36.00	
	127.00	142.00	R/S	4	15.00		0.60	36.00	
	142.00	170.00	R/S	4	28.00		0.60	67.20	
	1st Cross Road Chinnappa Layout								
	LHS								
	0.00	15.00	L/S	4	15.00		0.60	36.00	
	15.00	30.00	L/S	4	15.00		0.60	36.00	
	30.00	45.00	L/S	4	15.00		0.60	36.00	
	45.00	50.00	L/S	4	5.00		0.60	12.00	
	RHS								
	0.00	15.00	R/S	4	15.00		0.60	36.00	
	15.00	30.00	R/S	4	15.00		0.60	36.00	

Measurements recorded on									
Sl No.	Description of item	Chainage	Unit	No	L	B	D	Qty	Remarks
	30.00	40.00	R/S	4	10.00		0.60	24.00	
				Sqm				1017.60	NDP DE(WZ) 11/12/18



Consultant

Assistant Engineer

Assistant Executive Engineer

Measurements recorded on								
Sl No.	Description of item Chainage	Unit	No	L	B	D	Qty	Remarks
23	KSRB 4.9.2 : Providing **T.M.T steel reinforcement for R.C.C work** including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 **- TMT bars Fe 500**							
	1st Main road Chinnappa Layout							
	LHS							
	Main Bars							
	10 main U bars	1	2200.00	2.50		0.617	3395.06	
	Distribution bars							
	8mm Dia bars							
		1	13.00	176.00		0.395	903.90	
	RHS							
	10 main U bars							
	main bars	1	1975.00	2.50		0.617	3047.84	
	Distribution bars							
	8mm Dia bars							
	main bars	1	13.00	158.00		0.395	811.46	
	1st Cross Road Chinnappa Layout							
	LHS							
	Main Bars							
	10 main U bars	1	581.00	2.50		0.617	896.60	
	Distribution bars							
	8mm Dia bars							
		1	13.00	50.00		0.395	256.79	
	RHS							
	Main Bars							
	10 main U bars	1	500.00	2.50		0.617	771.60	
	Distribution bars							
	8mm Dia bars							
		1	13.00	40.00		0.395	205.43	
							10288.69	
			Tonne				**10.29**	

R.C.C. slab

RDJ
DE(HZ)
11/12/18

Consultant

Assistant Engineer

Assistant Executive Engineer

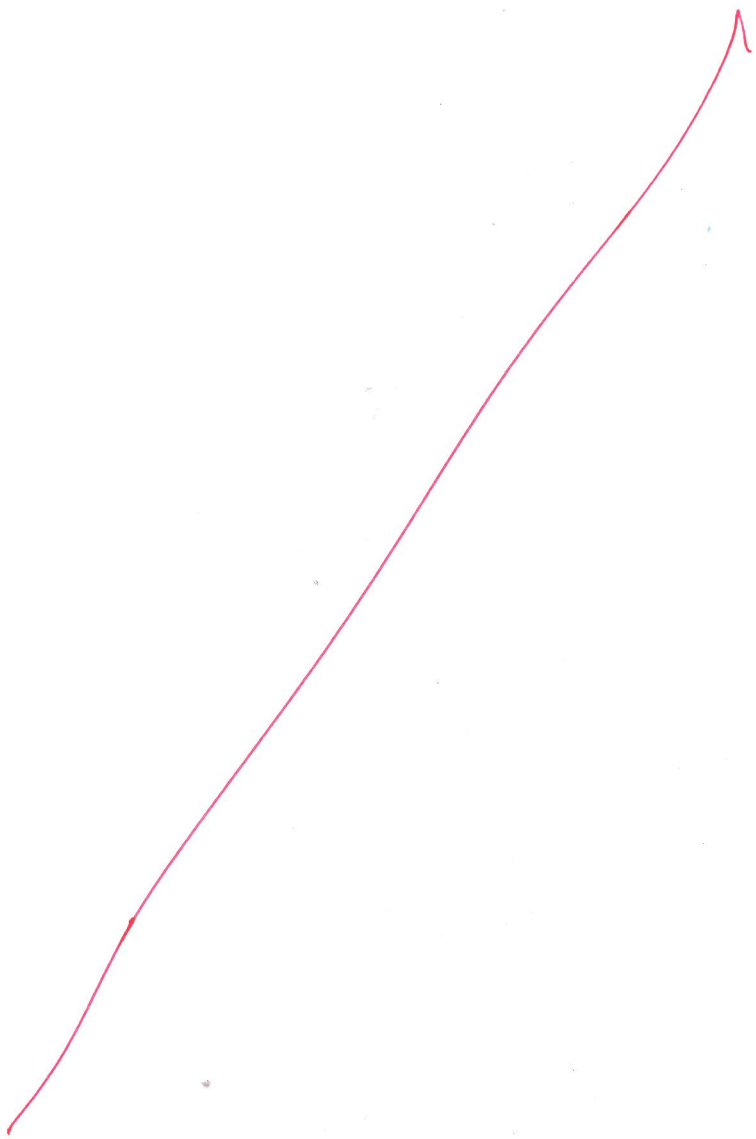
Measurements recorded on

Sl No.	Description of item / Chainage		Unit	No	L	B	D	Qty	Remarks
34	KSRB 4.2.2 : Providing and laying in position **reinforced cement concrete of Design mix M20** with OPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregtes @ 0.460 cum, with super plasticisers @ 3 liters confirming to is 9103-1999 reafirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works **in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc.,** including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications.								
	1st Main road Chinnappa Layout								
	Bottom Concrete								
	0.00	15.00	L/S	1	15.00	0.90	0.15	2.03	
	15.00	30.00	L/S	1	15.00	0.90	0.15	2.03	
	30.00	45.00	L/S	1	15.00	0.90	0.15	2.03	
	45.00	60.00	L/S	1	15.00	0.90	0.15	2.03	
	60.00	75.00	L/S	1	15.00	0.90	0.15	2.03	
	75.00	90.00	L/S	1	15.00	0.90	0.15	2.03	
	90.00	105.00	L/S	1	15.00	0.90	0.15	2.03	
	105.00	120.00	L/S	1	15.00	0.90	0.15	2.03	
	120.00	135.00	L/S	1	15.00	0.90	0.15	2.03	
	135.00	150.00	L/S	1	15.00	0.90	0.15	2.03	
	150.00	165.00	L/S	1	15.00	0.90	0.15	2.03	
	165.00	176.00	L/S	1	11.00	0.90	0.15	1.49	
	RHS								
	0.00	15.00	R/S	1	15.00	0.90	0.15	2.03	
	15.00	30.00	R/S	1	15.00	0.90	0.15	2.03	
	30.00	45.00	R/S	1	15.00	0.90	0.15	2.03	
	45.00	60.00	R/S	1	15.00	0.90	0.15	2.03	
	60.00	65.00	R/S	0	5.00	0.00	0.15	0.00	**Cross Road**
	65.00	80.00	R/S	1	15.00	0.90	0.15	2.03	
	80.00	90.00	R/S	1	10.00	0.90	0.15	1.35	
	90.00	97.00	R/S	0	7.00	0.00	0.15	0.00	**Cross Road**
	97.00	112.00	R/S	1	15.00	0.90	0.15	2.03	
	112.00	127.00	R/S	1	15.00	0.90	0.15	2.03	
	127.00	142.00	R/S	1	15.00	0.90	0.15	2.03	
	142.00	170.00	R/S	1	28.00	0.90	0.15	3.78	
	1st Cross Road Chinnappa Layout								
	LHS								
	0.00	15.00	L/S	1	15.00	0.90	0.15	2.03	
	15.00	30.00	L/S	1	15.00	0.90	0.15	2.03	
	30.00	45.00	L/S	1	15.00	0.90	0.15	2.03	
	45.00	50.00	L/S	1	5.00	0.90	0.15	0.68	
	RHS								

Measurements recorded on

Sl No.	Description of item		Unit	No	L	B	D	Qty	Remarks
	Chainage								
	0.00	15.00	R/S	1	15.00	0.90	0.15	2.03	
	15.00	30.00	R/S	1	15.00	0.90	0.15	2.03	
	30.00	40.00	R/S	1	10.00	0.90	0.15	1.35	
	Side Wall								
	1st Main road Chinnappa Layout								
	LHS								
	0.00	15.00	L/S	2	15.00	0.15	0.60	2.70	
	15.00	30.00	L/S	2	15.00	0.15	0.60	2.70	
	30.00	45.00	L/S	2	15.00	0.15	0.60	2.70	
	45.00	60.00	L/S	2	15.00	0.15	0.60	2.70	
	60.00	75.00	L/S	2	15.00	0.15	0.60	2.70	
	75.00	90.00	L/S	2	15.00	0.15	0.60	2.70	
	90.00	105.00	L/S	2	15.00	0.15	0.60	2.70	
	105.00	120.00	L/S	2	15.00	0.15	0.60	2.70	
	120.00	135.00	L/S	2	15.00	0.15	0.60	2.70	
	135.00	150.00	L/S	2	15.00	0.15	0.60	2.70	
	150.00	165.00	L/S	2	15.00	0.15	0.60	2.70	
	165.00	176.00	L/S	2	11.00	0.15	0.60	1.98	
	RHS								
	0.00	15.00	R/S	2	15.00	0.15	0.60	2.70	
	15.00	30.00	R/S	2	15.00	0.15	0.60	2.70	
	30.00	45.00	R/S	2	15.00	0.15	0.60	2.70	
	45.00	60.00	R/S	2	15.00	0.15	0.60	2.70	
	60.00	65.00	R/S	0	5.00	0.00	0.00	0.00	**Cross Road**
	65.00	80.00	R/S	2	15.00	0.15	0.60	2.70	
	80.00	90.00	R/S	2	10.00	0.15	0.60	1.80	
	90.00	97.00	R/S	0	7.00	0.00	0.00	0.00	**Cross Road**
	97.00	112.00	R/S	2	15.00	0.15	0.60	2.70	
	112.00	127.00	R/S	2	15.00	0.15	0.60	2.70	
	127.00	142.00	R/S	2	15.00	0.15	0.60	2.70	
	142.00	170.00	R/S	2	28.00	0.15	0.60	5.04	

Measurements recorded on									
Sl No.	Description of item / Chainage		Unit	No	L	B	D	Qty	Remarks
	1st Cross Road Chinnappa Layout								
	LHS								
	0.00	15.00	L/S	2	15.00	0.15	0.60	2.70	
	15.00	30.00	L/S	2	15.00	0.15	0.60	2.70	
	30.00	45.00	L/S	2	15.00	0.15	0.60	2.70	
	45.00	50.00	L/S	2	5.00	0.15	0.60	0.90	
	RHS								
	0.00	15.00	R/S	2	15.00	0.15	0.60	2.70	
	15.00	30.00	R/S	2	15.00	0.15	0.60	2.70	
	30.00	40.00	R/S	2	10.00	0.15	0.60	1.80	
							Cum	133.56	NDP DE(Tech)



Measurements recorded on

Sl No.	Description of item / Chainage		Unit	No	L	B	D	Qty	Remarks
36	Providing **precast slab of 100 mm thick** including cost of all materials, labour, curing, transportation, loading unloading, etc., complete as per the direction of engineer in charge- Data rate								
	1st Main road Chinnappa Layout								
	LHS								
	0.00	15.00	L/S	1	15.00		0.90	13.50	
	15.00	30.00	L/S	1	15.00		0.90	13.50	
	30.00	45.00	L/S	1	15.00		0.90	13.50	
	45.00	60.00	L/S	1	15.00		0.90	13.50	
	60.00	75.00	L/S	1	15.00		0.90	13.50	
	75.00	90.00	L/S	1	15.00		0.90	13.50	
	90.00	105.00	L/S	1	15.00		0.90	13.50	
	105.00	120.00	L/S	1	15.00		0.90	13.50	
	120.00	135.00	L/S	1	15.00		0.90	13.50	
	135.00	150.00	L/S	1	15.00		0.90	13.50	
	150.00	165.00	L/S	1	10.00		0.90	9.00	
	165.00	176.00	L/S	1	11.00		0.90	9.90	
	RHS								
	0.00	15.00	R/S	1	15.00		0.90	13.50	
	15.00	30.00	R/S	1	10.00		0.90	9.00	
	30.00	45.00	R/S	1	10.00		0.90	9.00	
	45.00	60.00	R/S	1	10.00		0.90	9.00	
	60.00	65.00	R/S	0	5.00		0.90	0.00	**Cross Road**
	65.00	80.00	R/S	1	15.00		0.90	13.50	
	80.00	90.00	R/S	1	10.00		0.90	9.00	
	90.00	97.00	R/S	0	7.00		0.90	0.00	**Cross Road**
	97.00	112.00	R/S	1	15.00		0.90	13.50	
	112.00	127.00	R/S	1	15.00		0.90	13.50	
	127.00	142.00	R/S	1	15.00		0.90	13.50	
	142.00	170.00	R/S	1	15.00		0.90	13.50	
	1st Cross Road Chinnappa Layout								
	0.00	15.00	L/S	1	15.00		0.90	13.50	
	15.00	30.00	L/S	1	15.00		0.90	13.50	
	30.00	45.00	L/S	1	10.00		0.90	9.00	
	45.00	50.00	L/S	1	4.00		0.90	3.60	
			Sqm					**310.50**	

Consultant

Assistant Engineer

Assistant Executive Engineer